

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Patent Application of	)	
	)	
Jeffrey A. DEAN et al.	)	Mail Stop APPEAL BRIEF - PATENTS
	)	
Application No.: 09/734,883	)	Group Art Unit: 2176
	)	
Filed: December 13, 2000	)	Examiner: J. Debrow
	)	
For: SCORING LINKS IN A	)	
DOCUMENT	)	

U.S. Patent and Trademark Office  
Customer Window, Mail Stop Appeal Brief - Patents  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

**REPLY BRIEF UNDER 37 C.F.R. § 41.41**

This Reply Brief is submitted in response to the Examiner's Answer, mailed September 17, 2008.

I. STATUS OF CLAIMS

Claims 39 and 41-66 are pending in this application.

Claims 39, 41, 44-46, 52, 53, 56-61, and 64-66 have been finally rejected under 35 U.S.C. § 103(a) as unpatentable over Armstrong et al. ("WebWatcher: A Learning Apprentice for the World Wide Web, 1995") in view of Pant et al. (U.S. Patent No. 6,012,053).

Claims 47-51 have been finally rejected under 35 U.S.C. § 103(a) as unpatentable over Arthurs (U.S. Patent No. 6,591,261) in view of Pant et al.

Claims 42, 43, 54, 55, 62, and 63 have been finally rejected under 35 U.S.C. § 103(a) as unpatentable over Armstrong et al. in view of Pant et al. and Page (U.S. Patent No. 6,285,999).

Claims 1-38 and 40 were previously canceled without prejudice or disclaimer.

Claims 39 and 41-66 are the subject of the present appeal. These claims are reproduced in the Claim Appendix of the Appeal Brief, filed June 20, 2008.

II. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

A. Claims 39, 41, 44-46, 52, 53, 56-61, and 64-66 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Armstrong et al. in view of Pant et al.

B. Claims 47-51 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Arthurs in view of Pant et al.

C. Claims 42, 43, 54, 55, 62, and 63 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Armstrong et al. in view of Pant et al. and Page.

III. RESPONSE TO ARGUMENT SECTION OF EXAMINER'S ANSWERA. **Response to Rejection of Claims 39, 41, 44-46, 59, and 64-66 Under 35 U.S.C. § 103(a) Based on Armstrong et al. and Pant et al.**

## 1. Claims 39, 44, and 45.

Independent claim 39 recites, for example, modifying an identified document, that is stored on a server in a network, based on scores determined for a plurality of the links in the identified document, where the modifying includes reordering at least two of the links in the identified document based on the determined scores, or sorting at least two of the links in the identified document based on the determined scores. In the Appeal Brief, Appellants provided substantial reasons why Armstrong et al. and Pant et al., whether considered alone or in any reasonable combination, do not disclose the combination of features recited in claim 1. Appeal Brief, pages 10-13.

In the Examiner's Answer, the Examiner alleged that:

It would have been obvious to one of ordinary skill in the art to modify Armstrong's WebWatcher teaching of identifying a document stored on a server, which contain links with Pant teach of scoring and sorting or reordering the links of a document for the benefit of obtain the claim invention.

Examiner's Answer, page 29. Appellants submit that the Examiner's allegation lacks merit. As explained in the Appeal Brief, Pant et al. does not score, sort, or reorder links of a document. Rather, Pant et al. scores, sorts, and reorders search results, and Pant et al. *specifically* discloses that the search results are *not* formed into an HTML document until after the search results are scored and ranked. Column 5, line 61 - col. 6, line 15.

Further, the Examiner admits that the Examiner is combining the disclosures of Armstrong et al. and Pant et al. for the sole "benefit of obtaining the claim invention."

Examiner's Answer, page 29. This reason for combining the alleged disclosures of Armstrong et al. and Pant et al. is clearly impermissible. The Examiner cannot establish a prima facie case of obviousness by providing reasons based on Appellant's application, as the Examiner has done in the Examiner's Answer. Rather, the Examiner must provide a reasonable explanation of what one of ordinary skill in the art at the time of Appellants' invention would have done without knowledge of Appellants' invention. The Examiner's reason clearly falls short of establishing a prima facie case of obviousness.

The Examiner also alleged that:

Webwatcher searches a webpage/document by examining the links on the document to determine if the link leads to the information the user desires. If the desired information is found, WebWatchers highlights the promising hyperlinks on the user's display. Using the broadest reasonable interpretation, the examiner concludes the highlights the promising hyperlinks implicitly teaches a scoring process. Further as Webwatcher returns a copy of the document with highlighted links, it can be interpreted Webwatcher's search results.

Examiner's Answer, page 30. Appellants submit that the Examiner is mischaracterizing the disclosure of Armstrong et al. in an attempt to make the disclosure of Armstrong et al. appear similar to the disclosure of Pant et al., and to, thereby, somehow justify the Examiner's combination of Armstrong et al. and Pant et al.

The Examiner alleged that it is reasonable to interpret the links in a web page in Armstrong et al. as search result links. Examiner's Answer, page 30. Appellants submit that this is an unreasonable allegation. A web page operated upon by the WebWatcher system in Armstrong et al. is simply a web page in which a link in the web page might be highlighted to indicate to a user that the user should consider selecting that link. Figures 1-5; page 1, right column, first paragraph. The links in the web page before the WebWatcher system acts upon the

web page are the same as the links in the web page after the WebWatcher system acts upon the web page. Figures 1 and 4. Contrary to the Examiner's allegation, the links in the web page in Armstrong et al. are not links generated based on a search performed by the WebWatcher system. Thus, Appellants submit that it is unreasonable to interpret the links in the web pages in Armstrong et al. as search result links.

Nevertheless, even assuming, for the sake of argument, that the Examiner's allegation that the links in the web page in Armstrong et al. are search result links (a point that Appellants do not concede for at least the reasons given herein), Appellants submit that Armstrong et al. and Pant et al., whether taken alone or in any reasonable combination, do not disclose or suggest modifying an identified document, that is stored on a server in a network, based on scores determined for a plurality of the links in the identified document, where the modifying includes reordering at least two of the links in the identified document based on the determined scores, or sorting at least two of the links in the identified document based on the determined scores, as recited in claim 39, for at least the reasons given herein and in the Appeal Brief. Appeal Brief, pages 10-13.

For at least these reasons and the reasons given in the Appeal Brief, it is respectfully submitted that claim 39 is patentable over Armstrong et al. and Pant et al., whether taken alone or in any reasonable combination, under 35 U.S.C. § 103. Reversal of the rejection of claim 39 is respectfully requested.

Claims 44 and 45 depend from claim 39. Claims 44 and 45 are, therefore, patentable over Armstrong et al. and Pant et al., whether taken alone or in any reasonable combination,

under 35 U.S.C. § 103 for at least the reasons given with regard to claim 39. Reversal of the rejection of claims 44 and 45 is respectfully requested.

2. Claim 41.

Dependent claim 41 recites, for example, determining a score for each of the linked documents based on the scores of the one or more linking documents (which contain links to the linked documents), and associating the determined scores for the linked documents with the corresponding links in the identified document. In the Appeal Brief, Appellants provided substantial reasons why Armstrong et al. and Pant et al., whether considered alone or in any reasonable combination, do not disclose these features of claim 41. Appeal Brief, pages 14-16.

In the Examiner's Answer, the Examiner alleged that:

the WebWatcher program would implicitly have a mechanism in place to determine scores for a plurality of the links in the identified document in order to determine which links/documents to strongly recommend. Therefore in order for WebWatcher to "strongly" recommend a hyperlink, there would be a mechanism in place to determine the relevance of the searched links and the recommended (highlighted) hyperlink would be determined by it's score.

Examiner's Answer, pages 31-32. Even assuming, for the sake of argument, that the Examiner is correct that the WebWatcher system would implicitly have a mechanism to score links in a document (a point that Appellants do not concede), the Examiner has not established, and in fact Armstrong et al. does not disclose, that the scoring mechanism scores the links based on the scores of the linked documents pointed to by those links, where the scores of the linked documents are based on the scores of one or more linking documents that link to the linked documents. There might be many ways to score a link. Thus, the Examiner's general allegation, that the WebWatcher system implicitly scores links, falls fall short of establishing that the

WebWatcher system performs the specific scoring technique of determining a score for each of the linked documents based on the scores of the one or more linking documents (which contain links to the linked documents), and associating the determined scores for the linked documents with the corresponding links in the identified document, as recited in claim 41.

For at least these reasons and the reasons given in the Appeal Brief, it is respectfully submitted that claim 41 is patentable over Armstrong et al. and Pant et al., whether taken alone or in any reasonable combination, under 35 U.S.C. § 103. Reversal of the rejection of claim 41 is respectfully requested.

3. Claim 46.

Dependent claim 46 recites, for example, deleting one of the links from the identified document when the determined score for the one of the links falls below a threshold. In the Appeal Brief, Appellants provided substantial reasons why Armstrong et al. and Pant et al., whether considered alone or in any reasonable combination, do not disclose these features of claim 46. Appeal Brief, pages 16-18.

In the Examiner's Answer, the Examiner alleged that

using the broadest reasonable interpretation, regardless of the relevance factor, the result of the search, which is determined by the number of hits found during the search, will be the same. However only links with scores above an established threshold will be displayed to the user. Links which fall below the threshold will be deleted from the identified document.

Examiner's Answer, page 32. Appellants submit that the Examiner's allegation lacks merit. As explained in the Appeal Brief, the search results, disclosed in Pant et al., are **not** links in a document that is stored on a server in a network. Pant et al. specifically discloses that the search results are **not** formed into an HTML document until after the search results are scored and



ranked. Column 5, line 61 - col. 6, line 15. Therefore, the Examiner's allegation that links that fall below a threshold "will be deleted from the identified document" is unsupported by the disclosure of Pant et al.

Further, even assuming, for the sake of argument, that Pant et al. discloses deleting links below a threshold (a point that Appellants do not concede), the deleting of these links would occur prior to a document being formed since the search results (links) in Pant et al. are not formed into an HTML document until after the search results are scored and ranked. Column 5, line 61 - col. 6, line 15. Therefore, contrary to the Examiner's allegation, Pant et al. does not disclose or suggest deleting one of the links from the identified document when the determined score for the one of the links falls below a threshold, as recited in claim 46.

For at least these reasons and the reasons given in the Appeal Brief, it is respectfully submitted that claim 46 is patentable over Armstrong et al. and Pant et al., whether taken alone or in any reasonable combination, under 35 U.S.C. § 103. Reversal of the rejection of claim 46 is respectfully requested.

4. Claims 59 and 64-66.

Independent claim 59 recites, for example, means for providing, to a user, an identified document, which is identified based on an address associated with the document, with additional information regarding the linked document pointed to by one of a plurality of links in the identified document. In the Appeal Brief, Appellants provided substantial reasons why Armstrong et al. and Pant et al., whether considered alone or in any reasonable combination, do not disclose these features of claim 59. Appeal Brief, pages 24-26.

In the Examiner's Answer, the Examiner alleged that when WebWatcher

[e]ncounters an especially promising page while searching ahead, it might suggest to the user jump directions to this page rather than follow tediously along the path that the agent has already traversed. Thus Armstrong discloses providing additional information regarding the linked document pointed to by one of a plurality of links in the identified document.

Examiner's Answer, page 35. Appellants submit that the Examiner's conclusion is unsupported by the Examiner's allegation. Armstrong et al. discloses that the WebWatcher system can suggest an especially promising page that is several links ahead of a current page (rather than making the user follow a tedious path to that page). Page 3, right column, second paragraph. Contrary to the Examiner's conclusion, this promising page, identified by the WebWatcher system while the user is in a current page, is **not** information regarding a linked document pointed to by a link in the current page. Rather, Armstrong et al. makes it clear that there are several links separating the promising page from the current page. Page 3, right column, second paragraph. Thus, Armstrong et al. does not disclose or suggest means for providing, to a user, an identified document, which is identified based on an address associated with the document, with additional information regarding the linked document pointed to by one of a plurality of links in the identified document, as recited in claim 59.

For at least these reasons and the reasons given in the Appeal Brief, it is respectfully submitted that claim 59 is patentable over Armstrong et al. and Pant et al., whether taken alone or in any reasonable combination, under 35 U.S.C. § 103. Reversal of the rejection of claim 59 is respectfully requested.

Claims 64-66 depend from claim 59. Claims 64-66 are, therefore, patentable over Armstrong et al. and Pant et al., whether taken alone or in any reasonable combination, under 35 U.S.C. § 103 for at least the reasons given with regard to claim 59. Reversal of the rejection of

claims 64-66 is respectfully requested.

**B. Response to Rejection of Claims 47, 50, and 51 Under 35 U.S.C. § 103(a) Based on Arthurs and Pant et al.**

1. Claim 47.

Independent claim 47 recites, for example, determining a score for one of the links in a document, corresponding to a selected search result, based on a degree of match between the search query and a content of a linked document pointed to by the one of the links. In the Appeal Brief, Appellants provided substantial reasons why Arthurs and Pant et al., whether considered alone or in any reasonable combination, do not disclose this feature of claim 47. Appeal Brief, pages 28-30.

In the Examiner's Answer, the Examiner alleged that

Arthurs discloses a search result which displays sites/hyperlinks that are rank according to scores. The score is determined based in which relevance/weight or score is determined based on the frequency and location that a word resides on the web page. Upon user selecting a particular displayed website/hyperlink from the search result, common sites to the selected website/hyperlink and the search arguments are displayed to the user.

Examiner's Answer, pages 36-37. While Arthurs discloses performing a search to find web sites that match a search query (column 6, line 19 – column 7, line 3), Arthurs does not disclose or remotely suggest scoring links in one of these web sites (corresponding to one of the search results) based on a degree of match between the search query and the content of web sites pointed to by the links in the one web site. Thus, contrary to the Examiner's allegation, Arthurs does not disclose or suggest determining a score for one of the links in a document,

corresponding to a selected search result, based on a degree of match between the search query and a content of a linked document pointed to by the one of the links, as recited in claim 47.

For at least these reasons and the reasons given in the Appeal Brief, it is respectfully submitted that claim 47 is patentable over Arthurs and Pant et al., whether taken alone or in any reasonable combination, under 35 U.S.C. § 103. Reversal of the rejection of claim 47 is respectfully requested.

2. Claim 50.

Dependent claim 50 recites that modifying the document includes changing at least one visual characteristic of the one of the links within the document based on the determined score. In the Appeal Brief, Appellants provided substantial reasons why Arthurs and Pant et al., whether considered alone or in any reasonable combination, do not disclose this feature of claim 50. Appeal Brief, pages 34-35.

In the Examiner's Answer, the Examiner alleged that

[u]sing the broadest interpretation, the Examiner concludes the *link* can change from visible to invisible as the user no longer have access that the link.

Examiner's Answer, page 38 (emphasis in original). Appellants submit that the Examiner's allegation based on "broadest interpretation" is unreasonable. Pant et al. does not disclose anything that can reasonably be interpreted as invisible links. Thus, the Examiner's allegation finds no support in the disclosure of Pant et al.

For at least these reasons and the reasons given in the Appeal Brief, it is respectfully submitted that claim 50 is patentable over Arthurs and Pant et al., whether taken alone or in any

reasonable combination, under 35 U.S.C. § 103. Reversal of the rejection of claim 50 is respectfully requested.

3. Claim 51.

Dependent claim 51 recites, for example, deleting one of the links from a document, corresponding to a selected search result, when the determined score for the one of the links falls below a threshold. In the Appeal Brief, Appellants provided substantial reasons why Arthurs and Pant et al., whether considered alone or in any reasonable combination, do not disclose this feature of claim 51. Appeal Brief, pages 35-37.

In the Examiner's Answer, the Examiner alleged that

Arthurs disclose the association database is pared or culled to contain only associated sites that are deemed to meet or exceed a particular threshold. . . . Thus any web sites that fall below the particular threshold are not displayed on the search display. Therefore the Examiner concludes Arthurs implicitly teaches deleting one of the links from a document, corresponding to a selected search result, when the determined score for the one of the links falls below a threshold.

Examiner's Answer, page 38-39. Appellants submit that the Examiner's conclusion is unsupported by the Examiner's allegations concerning Arthurs. Even assuming, for the sake of argument, that Arthurs discloses only including web sites meeting or exceeding a threshold in a database and not showing these web sites with search results (points that Appellants do not concede), this is very different from what is being recited in claim 51. Claim 51 deals with deleting a link in a document corresponding to a selected search result, not deciding whether to include a web site in a database. Contrary to the Examiner's conclusion, there is absolutely nothing in the disclosure of Arthurs that can remotely be interpreted as corresponding to deleting

one of the links from a document, corresponding to a selected search result, when the determined score for the one of the links falls below a threshold, as recited in claim 51.

For at least these reasons and the reasons given in the Appeal Brief, it is respectfully submitted that claim 51 is patentable over Arthurs and Pant et al., whether taken alone or in any reasonable combination, under 35 U.S.C. § 103. Reversal of the rejection of claim 51 is respectfully requested.

IV. CONCLUSION

In view of the foregoing arguments and the arguments presented in the Appeal Brief, Appellants respectfully solicit the Honorable Board to reverse the Examiner's rejections of claims 39 and 41-66 under 35 U.S.C. § 103.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

HARRITY & HARRITY, LLP

By: /Paul A. Harrity, Reg No 39574/  
Paul A. Harrity  
Reg. No. 39,574

Date: November 17, 2008

11350 Random Hills Road  
Suite 600  
Fairfax, Virginia 22030  
(571) 432-0800  
Customer No. 44989